IN THE CLAIMS

Please amend the claims as indicated:

1. (previously presented) A system capable of dynamically configuring a multi-node computer, the system comprising:

a plurality of processor nodes; and

a scalability management module directly coupled to each of the plurality of processor nodes, the scalability management module including:

a dedicated processor for managing the plurality of nodes, the dedicated processor not being from the plurality of processor nodes; and

a scalability chipset for enabling the dedicated processor to dynamically configures the plurality of nodes into a coordinated multi-node computer, wherein the scalability chipset comprises a local memory controller for a booting node in the plurality of processor nodes, instructions for processor allocation and set-up of hardware/software in the booting node, and host bridge controller information for the booting node,

wherein the multi-node computer is configured by the scalability management module without a re-wiring of connections between processor nodes during a subsequent reconfiguration of the multi-node computer.

2. (previously presented) The system of claim 1, wherein the scalability chipset in the scalability management module is capable of selectively configuring each processor node, in the coordinated multi-node computer, as a host node, a secondary node, or a hot spare node.

3. (original) The system of claim 1, wherein the plurality of processor nodes includes a hot spare node capable of being configured by the scalability management module if another of the processor nodes fails or is removed from the multi-node computer.

4. (original) The system of claim 1, further comprising:

a remote manager logic coupled to the scalability management module, wherein the remote manager logic controls the configuration of the multi-node computer via the scalability management module.

5. (previously presented) A method for dynamically configuring a multi-node computer, the method comprising:

performing a primary boot on a plurality of processor nodes;

registering configuration parameters from each of the processor nodes with a scalability management module, the scalability management module including:

a dedicated processor for managing the plurality of nodes, the dedicated processor not being from the plurality of processor nodes; and

a scalability chipset for enabling the dedicated processor to dynamically configures the plurality of nodes into a coordinated multi-node computer, wherein the scalability chipset comprises a local memory controller for a booting node in the plurality of processor nodes, instructions for processor allocation and set-up of hardware/software in the booting node, and host bridge controller information for the booting node;

configuring each processor node according to configuration data supplied by the scalability management module; and

completing a full boot on a host processor node, the host processor node being selected by the scalability management module from the plurality of processor nodes, to enable the host processor node to control the multi-node computer.

6. (previously presented) The method of claim 5, wherein the scalability chipset in the scalability management module is capable of selectively configuring each processor node, in the coordinated multi-node computer, as a host node, a secondary node, or a hot spare node.

7. (original) The method of claim 5, wherein the plurality of processor nodes includes a hot spare node capable of being configured by the scalability management module if another of the processor nodes fails or is removed from the multi-node computer.

8. (original) The method of claim 5, further comprising:

coupling a remote manager logic to the scalability management module, wherein the remote manager logic controls the configuration of the multi-node computer via the scalability management module.

9. (currently amended) A computer program product, residing on a ~~computer non-writable storage and writable~~ computer-readable storage media, for dynamically configuring a multi-node computer, the computer program product comprising:

program code for performing a primary boot on a plurality of processor nodes;

program code for registering configuration parameters from each of the processor nodes with a scalability management module, the scalability management module including:

a dedicated processor for managing the plurality of nodes, the dedicated processor not being from the plurality of processor nodes; and

a scalability chipset for enabling the dedicated processor to dynamically configures the plurality of nodes into a coordinated multi-node computer, wherein the scalability chipset comprises a local memory controller for a booting node in the plurality of processor nodes, instructions for processor allocation and set-up of hardware/software in the booting node, and host bridge controller information for the booting node;

program code for configuring each processor node according to configuration data supplied by the scalability management module; and

program code for completing a full boot on a host processor node, the host processor node being selected by the scalability management module from the plurality of processor nodes, to enable the host processor node to control the multi-node computer.

10. (previously presented) The computer program product of claim 9, wherein the scalability chipset in the scalability management module is capable of selectively configuring each processor node, in the coordinated multi-node computer, as a host node, a secondary node, or a hot spare node.

11. (original) The computer program product of claim 9, wherein the plurality of processor nodes includes a hot spare node capable of being configured by the scalability management module if another of the processor nodes fails or is removed from the multi-node computer.

12. (original) The computer program product of claim 9, further comprising:

program code for coupling a remote manager logic to the scalability management module, wherein the remote manager logic controls the configuration of the multi-node computer via the scalability management module.

13-16. (cancelled)

17. (original) The system of claim 3, wherein the hot spare node does not include a mass storage device.

18. (original) The method of claim 7, wherein the hot spare node does not include a mass storage device.

19. (original) The computer program product of claim 11, wherein the hot spare node does not include a mass storage device.

20. (original) A method for dynamically configuring a multi-node computer, the method comprising:

performing a primary boot of a booting node in a multi-node computer, the primary boot including a first part of a Power On Self-Test (POST) and a memory configuration of the booting node;

in response to the primary boot being completed for the booting node, determining if the booting node is to be configured as a standalone node that is not a component of the multi-node computer;

in response to determining that the booting node is to be configured as a standalone node, configuring the booting node as a standalone node that is not a component of the multi-node computer;

in response to determining that the booting node is not to be configured as a standalone node, determining if a Scalability Management Module (SMM) is available to the booting node, wherein the SMM includes a master scalability chipset the includes memory controllers and processor allocation logic for the booting node;

in response to determining that the SMM is available to the booting node, registering unique configuration information for the booting node with the SMM, wherein the unique configuration information about the booting node that includes a Universal Unique Identifier (UUID for the booting node, a quantity and type of processors for the booting node, an amount of local memory in the booting node, identifiers for Input/Output (I/O) devices in the booting node, and an identifier of a backboard to which the booting node is coupled;

in response to determining that the booting node is to be part of the multi-processor computer system, waiting for a "green light" from the SMM indicating that the SMM has determined configuration information needed to boot the booting node;

in response to receiving a "green light" from the SMM, querying, by the booting node, the SMM to determine if the booting node will be booted as a host, secondary or hot spare node, and then booting the node as a host, secondary or hot spare node according to a determination by and an instruction from the SMM to the booting node;

in response to the booting node receiving an instruction to boot at a host node, booting the booting node as a host node and taking over control, by the host node, of any secondary nodes in the multi-processor computer system; and

in response to determining that the booting node is not to be configured as a host node, putting the processors in the booting node to sleep in order to allow a host node in the multi-processor system to control the booting node as a secondary or hot spare node.